

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

10/500642

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
12 September 2002 (12.09.2002)

PCT

(10) International Publication Number
WO 02/071356 A1(51) International Patent Classification⁷: G08B 13/186

(21) International Application Number: PCT/AU02/00007

(22) International Filing Date: 4 January 2002 (04.01.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PR 3578 7 March 2001 (07.03.2001) AU(71) Applicant (for all designated States except US): FUTURE FIBRE TECHNOLOGIES PTY LTD [AU/AU];
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

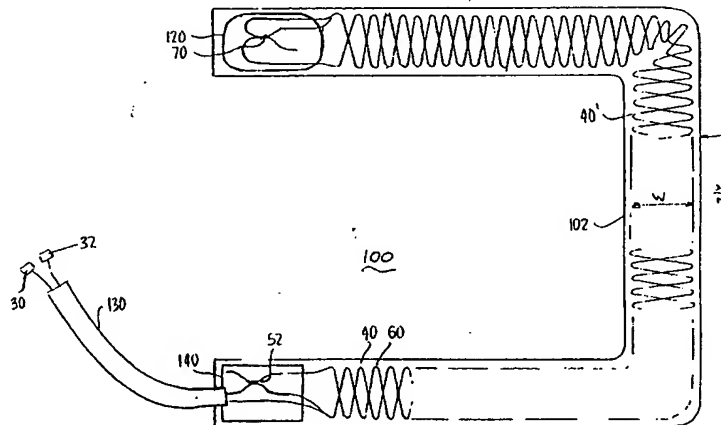
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PERIMETER SECURITY SYSTEM AND PERIMETER MONITORING METHOD



(57) Abstract: A perimeter security system is disclosed which includes a first cable (40) and a second cable (60) buried beneath the ground in a zig-zag pattern. The first cable (40) has a first fibre (44) and a further fibre (42). Second cable (60) has a second fibre (62). The first and second fibres (44) and (62) are connected by a coupler (52) at one end so that light can be launched into the first and second fibres (44) and (62) to propagate in one direction. The further fibre (42) is connected to a coupler (70) which also connects to the other end of the first and second fibres (44) and (62) so light can be launched into the fibres from the other end and travel in the opposite direction. Detectors (80) and (82) are provided for detecting an interference pattern produced by interference of the propagating light signals so that if a person attempts to breach the barrier by walking across the ground beneath which the cables are buried, the cables are moved to change the nature of the propagating light to in turn change the interference pattern to provide an indication of the intrusion. The location of the intrusion can also be determined by the time difference between receipt of the altered interference pattern propagating in the first direction, compared to that propagating in the opposition direction.

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